

History of telephony and wiring through old postcards

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Pre-1900: only aerial lines

After the introduction of telephony in Belgium, in the early 1880s, licences were given to private companies to build telephone networks. Originally the government thought of obliging these private companies to do the cabling underground. Finally this was cancelled as the cost was rather high.

All connections were made by overhead lines, either in urban, industrial and rural areas.

Fig. 1 is a postcard of the "industrial environment" of the port of Antwerp: in addition to frequent horse and cart traffic, there were also beautiful iron telephone poles (left on picture) that routed a new form of traffic: telephony!

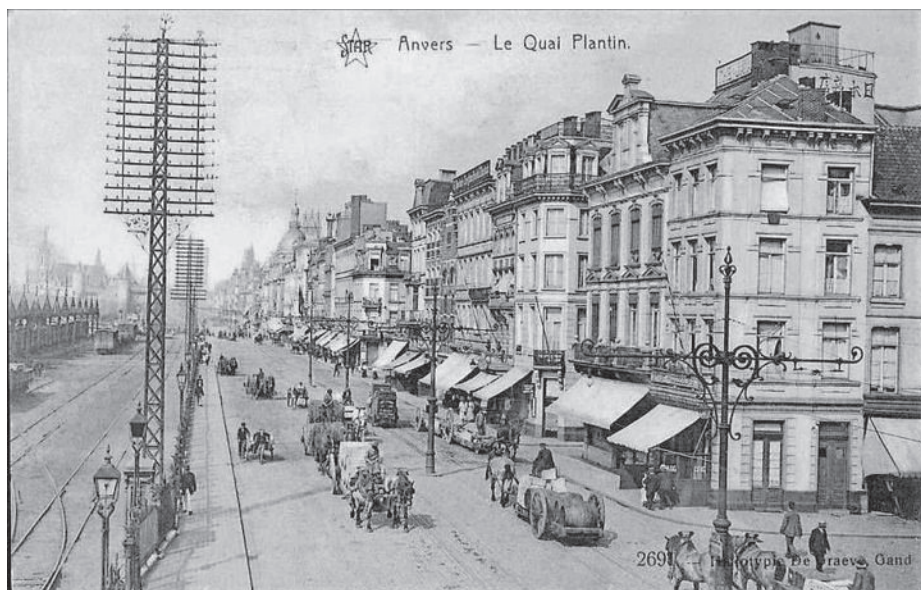


Fig. 1: Overhead wiring in the mid-1890s



Fig. 2 Antwerp City Hall

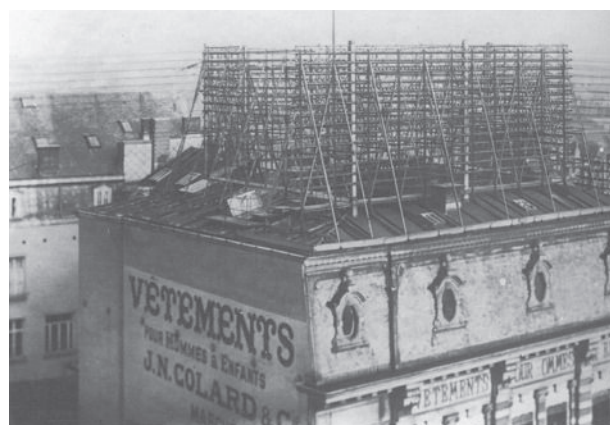


Fig. 3 Antwerp Telephone Exchange

Gradually, telephone poles started to appear in the streets everywhere. They led the wires to a derrick on the roof of usually a public building (e.g. city hall, train station, post office...), and so the wiring was routed above the roofs to the derrick on the roof of the telephone exchange building.

In urban areas, telephone poles were often made of iron. In more rural areas, they were usually made of wood. These wooden poles have been creosoted (which means: treated against rotting).

Derricks on public buildings were used to route the subscriber wires to the telephone exchange. Fig. 2 shows A derrick on the roof of the Antwerp

city hall (mid-1890s) and Fig. 3 on the Antwerp telephone exchange building.

The telephone exchange building was mostly called "Hôtel du téléphone" (telephone hotel) in French.

Fig. 4 shows derricks in three other cities: Charleroi, Mons and Brussels.

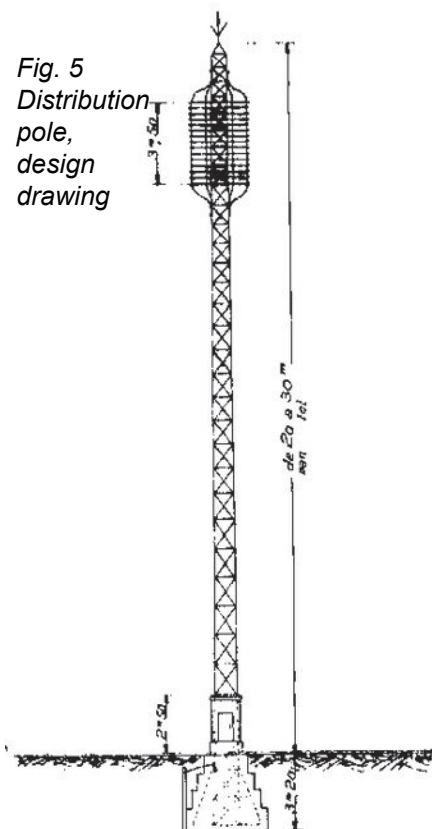
From 1900 partially underground

Originally, only one wire was used per subscriber, and an earth connection was used for the second conductor. When the government took over the telephone networks from the private companies in the mid-1890s, it was decided to make





Fig. 5
Distribution
pole,
design
drawing



above the roofs directly to the subscribers' houses.

The German firm Siemens & Halske was requested to install the underground cabling. Photo albums from the underground installation in Brussels (1899-1902) and Verviers (1909-1910) were found in the archives of the former telecommunication museum. Fig. 6 shows duct work in progress. I assume that the gentlemen with the hats never touched any tools!

Fig. 7 below shows three stages in installing the distribution pole.

Postcards with distribution poles



metres, i.e. high above the roofs (it was also two metres below ground level). From the telephone exchange, a cable containing a number of wire pairs was laid underground, arriving at the base of the distribution pole. From there the cable was led upwards and each wire ended in a connector/insulator.

These insulators consisted of glass, porcelain or, later, Bakelite. From that position, the wires were led

everything two-wire for quality reasons, which doubled the required wiring. At the same time, the number of telephone connections increased dramatically, especially for business applications and government services.

In an urban environment, this led to an overload of wiring in the streets. From 1899 onwards, underground cables were laid between the telephone exchange and the neighbourhoods where the telephones were to be connected.

In these neighbourhoods, a "distribution pole" was then erected, measuring up to twenty to thirty



Fig. 6: Installing underground cable in Brussels Ca 1900



Fig. 7A Erecting the pole



Fig. 7B: Terminating the underground cable

Old postcards from all over the country show such distribution poles.

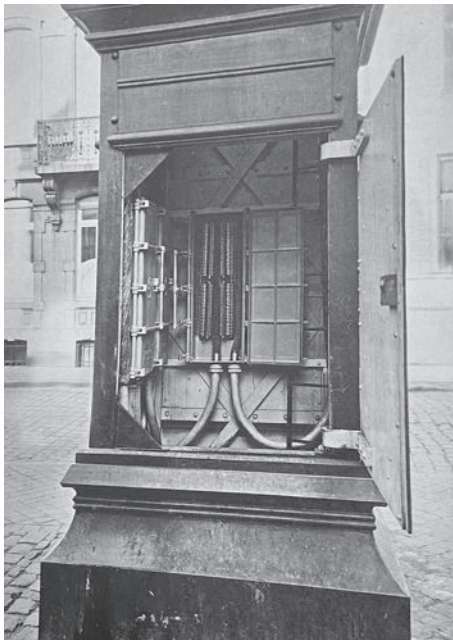


Fig. 7C: Lightning protection in the pillar base

They were installed at least until the mid-1930s. Since telephone wires are very thin compared to electricity cables and since the resolution of the postcards is limited, one never sees telephone wires on these pictures. I have collected digitally a large number of postcards of Belgium with distribution poles. A few examples are shown here.

Rural areas

In a rural environment, people continued to work with overhead



Fig. 8A Ghent



Fig. 8B: Merksem, suburb of Antwerp

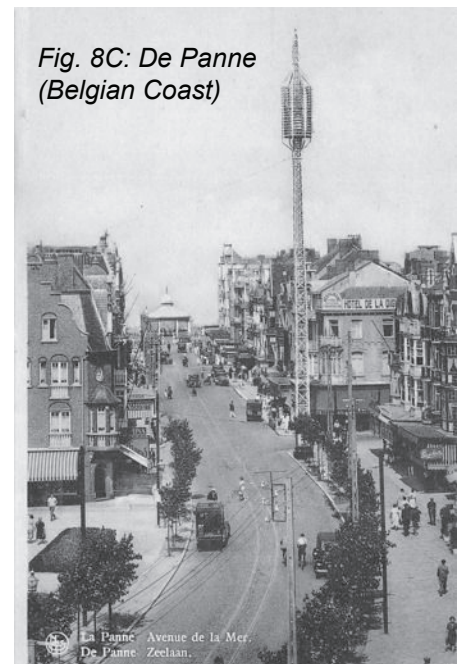


Fig. 8C: De Panne (Belgian Coast)



Fig. 8D: Antwerp



Fig. 8E: Brussels

wiring through wooden telephone poles until after the Second World War. In the village where I grew up (a suburb of Antwerp, see Figure 9), the wooden poles were replaced by underground wiring at the end of the 1950s. It was around 1980 that all overhead lines were replaced by completely underground wiring throughout the country.

Distribution poles in other countries

A survey was made among telephone historians in Germany, France, United Kingdom and USA. Unless I am mistaken, they did not seem to have used that system with distribu-



Fig. 9: Typical set-up with wooden telephone pole in a rural environment



Fig. 10: Distribution pole in Rotterdam, Netherlands

tion poles anywhere (please mail me if you have different information).

Only in the Netherlands until approximately 1930 was this system used too.

Picture: Arnold Abels, Van Houtwelingenmuseum Rotterdam, NL.

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